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TO: Distribution

FROM: H/Associate Administrator for Procurement
Q/Associate Administrator for
Safety and Mission Assurance

SUBJECT: Advanced Quality: A Guide for Aerospace Acquisition
Management Teams

NASA is aggressively developing new approaches to risk management designed to fulfill our product assurance responsibilities while bringing "best value" to the American taxpayer. The emerging model for Mission Success in the new business environment calls for greater integration of engineering, procurement, and mission assurance functions during the program formulation and planning process.

The enclosed guidance document, Advanced Quality: A Guide for Aerospace Acquisition Management Teams, provides specific guidance on implementing this model for complex aerospace development and production programs. After an introduction of Advanced Quality concepts and a discussion of tools and techniques, the guide presents tailorable language for program managers to consider including in solicitations. More importantly, the guide introduces or emphasizes a number of valuable concepts with more general applicability.

"Advanced Quality" is a key concept in the emerging Government risk management and product assurance model. It includes the following three principal components:

1. Mandatory Baseline Quality Management System (BQMS) consistent with the requirements of NMI 1270.3 (requiring ISO 9000 equivalency)

2. Advanced Quality Management System (optionally elected at the discretion of the program manager consistent with budget, schedule, and risk acceptance environment)

3. Project-Unique risk mitigation requirements (e.g., precision cleaning requirements for liquid oxygen systems)

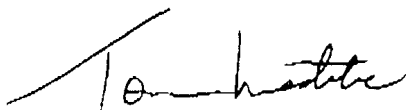
The document provides a tool-set for program managers developing Requests for Proposals (RFPs). It introduces Advanced Quality concepts, discusses tools and techniques, and presents tailorable language for incorporation in new RFPs at the discretion of the program manager. Nothing is mandated. The notion is to selectively seek additional risk mitigation needed above and beyond that provided by the BQMS, depending on the project complexity, criticality, budget, schedule, and risk acceptance level. The balancing of these concerns is the responsibility of the program manager. Center-based safety, mission assurance, reliability and engineering experts will help the program manager choose a risk mitigation strategy to fulfill his/her needs.

The non-proscriptive document incorporates several Government-wide acquisition reform initiatives:

- Promotion of greater use of non-Government standards and specifications
- Establishment of common or "single quality processes" for each Government contractor facility
- Promotion of the Performance Based Contracting thrust of identifying the Government "WHAT" and letting the contractor decide on the "HOW".

The document is available electronically and will also be available through the NASA Office of Safety and Mission Assurance world wide web Home Page. Please direct requests, questions, and comments to Mr. Steve Newman, Senior Technical

Advisor for Integrated Mission Assurance Planning in the Office of Safety and Mission Assurance, at 202-358-1408, FAX 202-358-2778, or email snewman@hq.nasa.gov.



for Deidre A. Lee



Frederick D. Gregory

Enclosure

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